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(54) Title: PROCESS FOR COATING CELL-CULTURE SUPPORT

(57) Abstract: The invention relates to a support for culturing cells, in particular to microcarriers coated with gelatine or gelatine-like proteins. Such microcarriers serve as support for culturing anchorage dependent cells. In particular the invention relates to a process for the preparation of a cell culture support comprising the step of coating a microcarrier bead with gelatine or gelatine-like protein, said gelatine or gelatine-like protein having a molecular weight of about 40 kDa to about 200 kDa.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N5/00 //C12N11/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, MEDLINE, BIOSIS, EMBASE, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 91/07485 A (BIO METRIC SYSTEMS INC) 30 May 1991 (1991-05-30) * page 9, last paragraph * page 11, paragraph 1 page 17; example 1 page 17, last paragraph page 18, paragraph 2 ---	1-7, 9, 10
Y	US 4 994 388 A (HILLEGAS WILLIAM J ET AL) 19 February 1991 (1991-02-19) cited in the application column 3, line 52 - line 60 column 6, line 28 - line 33 ---	8, 11 -/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>WO 01/34646 A (KIVIRIKKO KARI I ; NEFF THOMAS B (US); OLSEN DAVID R (US); CHANG RO) 17 May 2001 (2001-05-17)</p> <p>page 28, line 31 - line 36 page 31, line 27 - line 39 page 32, line 5 - line 11 page 34, line 21 - line 24 page 59, line 25 - line 28 page 71, line 33 - line 39 page 72, line 12 - line 16 ---</p>	8,11
Y	<p>EP 0 967 226 A (COHESION TECHNOLOGIES INC) 29 December 1999 (1999-12-29)</p> <p>page 2, line 21 page 3, line 14 - line 15 page 3, line 51 - line 56 page 7, line 47 - line 51 ---</p>	7-9,11
Y	<p>WERTEN M W T ET AL: "High-yield secretion of recombinant gelatins by <i>Pichia pastoris</i>" YEAST, CHICHESTER, SUSSEX, GB, vol. 15, no. 11, August 1999 (1999-08), pages 1087-1096, XP002165588 ISSN: 0749-503X abstract page 1087, right-hand column, line 4 - line 23 ---</p>	7-9,11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/NL 03/00922

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9107485	A	30-05-1991	AU WO	7787191 A 9107485 A1	13-06-1991 30-05-1991
US 4994388	A	19-02-1991	NONE		
WO 0134646	A	17-05-2001	AU AU BR CA CA CN EP EP JP JP WO WO US	1591701 A 1593001 A 0015508 A 2388477 A1 2390995 A1 1423659 T 1232181 A2 1232262 A2 2003516730 T 2003513988 T 0134646 A2 0134801 A2 2003064074 A1	06-06-2001 06-06-2001 10-06-2003 17-05-2001 17-05-2001 11-06-2003 21-08-2002 21-08-2002 20-05-2003 15-04-2003 17-05-2001 17-05-2001 03-04-2003
EP 0967226	A	29-12-1999	US AU AU CA EP JP US	6428978 B1 754608 B2 2693499 A 2269148 A1 0967226 A2 11332585 A 6413742 B1	06-08-2002 21-11-2002 18-11-1999 08-11-1999 29-12-1999 07-12-1999 02-07-2002